(15864)

November 14, 1975

MR. H. S. NEWMAN

T. C. WALKER

## SANITARY LANDFILL - POTISTOWN

Confirming our verbal discussion, our records indicate that during calendar 1975 to date our Chemicals Plant produced an average of 350,000 pounds (dry weight) of sludge (effluent solids) per month. In October this peaked to 580,000 pounds due to unusual production difficulties. Running at normal production levels we would anticipate an average of 400,000 - 450,000 pounds per month of sludge which must be placed on our landfill.

This being the case, it is probably more proper for the Plastics Company to share the normal operating costs of the Pottstown sanitary landfill with the Rubber Company on a fifty-fifty basis. By copy of this memo and our agreement, I am asking Mr. Johnson to establish this policy.

If our current tests so indicate, we may have to construct a trench around the existing and new landfill the cost of which should also be borne on a fifty-fifty basis. If it is necessary to entrench around the south lagoon of the Chemicals Plant, this cost should be borne by the Plastics Company.

Regardless of the methodology used to prorate the costs of operating our own landfill, there is no doubt that it is to the benefit of the Firestone Corporation to pursue this course of action rather than utilize "outside" landfill operations. I am hopeful that you would receive Akron approval for financing next years landfill operation in the very near future.

I should like to point out that the Plastics Company has expended considerable amounts of time and money in attempting to develop a method to recycle, recover and meaningfully utilize our sludge. I am sure you are aware that during much of 1973 and 1974 we actually sold this material when our product demand was at an all time high. We are continuing to investigate

alternates of recovering this sludge but the capital investment and energy requirements far outstrip that which can be recovered. We certainly would welcome any suggestions from your personnel.

T. C. Walker

TCW:md

cc: Nr. R. K. Johnson Mr. C. J. Kleinert discussions with DER representatives, the Firestone waste should be divided into two (2) categories; normal waste, and chemical waste. The normal waste would include:

## NORMAL WASTES

10 Tons/day Lumber, pallets, misc. wood and construction debris

5 Tons/day Paper, cardboard, fiber drums, textiles, rags, and fabric

8 Tons/day Scrap rubber, tires, tubes, bladders, rubber bales, etc.

2 Tons/day Plastic

500 Tons/yr. Roofing paper, gravel, concrete, tile

27+ Tons/day

The chemical waste would include:

## CHEMICAL WASTES

15 Tons/day Resin plant PVC clarifier sludge

5 Tons/day Tire buffing dust and sludges

Minor Soapstone, latex, solvents, etc. Quantities

20 Tons/day

- Utilize an impermeable, membrane liner to isolate the landfill site from the groundwater flow system.
- 2. Design the landfill site so that the flow of leachate can be controlled and the natural ground-water flow can be manipulated to prevent contamination, and provide for leachate extraction, if necessary.

The technique of flow manipulation was investigated first because: (1) The expenses of membrane liners is significantly greater than is flow manipulation,

(2) The existing landfill and sludge lagoon situations cannot be rectified by a membrane liner.

There are two interrelated and interconnected ground-water flow systems at the site. The first flow system consists of ground-water in the alluvial silts, sands, and gravels which were deposited by the river to a depth of about 20-25 feet below ground level. Water table levels in this material correlate closely with the river stage. The second ground-water flow system is located within the shale and siltstone bedrock underlying the alluvium at the site. Flow in this system occurs along joints and bedding planes in the bedrock and is strongly affected by the pumpage of plant water supply wells which are located adjacent to the site.

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